

Abstract

The present invention relates to a process for preparing an aqueous dispersion, by

- a) forming an initial charge from water and emulsifier,
- b) adding from 25.0 to 45.0 parts by weight of a first composition comprising
  - A) from 50.0 to 99.9 parts by weight of alkyl methacrylates,
  - B) from 0.0 to 40.0 parts by weight of alkyl acrylates,
  - C) from 0.1 to 10.0 parts by weight of crosslinking monomers and
  - D) from 0.0 to 8.0 parts by weight of styrenic monomersand polymerizing,
- c) adding from 35.0 to 55.0 parts by weight of a second composition comprising
  - E) from 80.0 to 100.0 parts by weight of (meth)acrylates
  - F) from 0.05 to 10.0 parts by weight of crosslinking monomers and
  - G) from 0.0 to 20.0 parts by weight of styrenic monomers,and polymerizing,
- d) adding from 10.0 to 30.0 parts by weight of a third composition comprising
  - H) from 50.0 to 100.0 parts by weight of alkyl methacrylates,
  - I) from 0.0 to 40.0 parts by weight of alkyl acrylates and
  - J) from 0.0 to 10.0 parts by weight of styrenic monomersand polymerizing.

Features of the process are that

- e) each polymerization is carried out at a temperature in the range from  $> 60$  to  $< 90^{\circ}\text{C}$  and

- f) the relative proportions of all of the substances are selected in such a way that the total weight of components A) to J), based on the total weight of the aqueous dispersion, is greater than 50.0% by weight.